AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for the detection of a base sequence of interest in a sample polynucleotide consisting essentially of the steps of:

(1) contacting the sample polynucleotide with at least one kind of probe polynucleotides in an aqueous solution to form a hybridization complex;

(2) isolating the hybridization complex;

(3) dissociating the hybridization complex to recover the probe polynucleotides; and

(4) identifying the probe polynucleotides to detect the base sequence of interest in the sample polynucleotide;

wherein each base sequence of interest in the sample polynucleotide is identified by one probe complementary to the base sequence of interest.

2. (previously presented): The method according to claim 1, wherein the hybridization is carried out in such a manner that none of the sample polynucleotide or the probe polynucleotides are immobilized.

3. (previously presented): The method according to claim 1 or 2, wherein plural kinds of probe polynucleotides are used to detect plural base sequences of interest.

4. (previously presented): The method according to claim 1 or 2, wherein the probe polynucleotides are labeled with fluorescent substance.

5. (previously presented): The method according to claim 1 or 2, wherein the probe polynucleotides are identified by means of hybridization with a polynucleotide chain complementary thereto.

6. (previously presented): The method according to claim 5, wherein the polynucleotide chains complementary to the probe polynucleotides are immobilized.

7. (previously presented): The method according to claim 6, wherein the immobilized polynucleotide chain complementary to the probe polynucleotides are in the form of a DNA or RNA chip.

8. (previously presented): The method according to claim 1 or 2, wherein plural kinds of probe polynucleotides are used to detect plural, non-contiguous base sequences of interest.